

CLAIMS

WHAT IS CLAIMED IS:

1. A terminal for optimizing reproduction of an audio signal that has source characteristic data and that is transmitted through a delivery channel, comprising:
 - a receiver that receives the audio signal and the source characteristic data;
 - a memory that stores the source characteristic data and delivery channel capability data; and

a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data and the delivery channel capability data.
2. The terminal of claim 1, wherein the memory comprises:
 - a channel map for generating a program guide based on the source characteristic data and the delivery channel capability data.
3. The terminal of claim 1, wherein the memory contains delivery channel capability data for at least two delivery channels.
4. The terminal of claim 1, wherein the memory comprises:
 - a program guide database that stores the source characteristic data; and
 - a channel map database that stores the delivery channel capability data.
5. The terminal of claim 4, wherein the terminal generates an assembled program guide based on the data in the program guide database and the channel map database.
6. The terminal of claim 4, wherein the program guide database stores the source characteristic data in at least one source characteristic data field.

7. The terminal of claim 6, wherein the audio signal is transmitted over one of at least two delivery channels, and wherein the program guide database has at least one source characteristic field assigned to each delivery channel.

8. The terminal of claim 4, wherein the channel map database stores the delivery channel capability data in at least one delivery channel capability data field.

9. The terminal of claim 8, wherein the audio signal is transmitted over one of at least two delivery channels, and wherein the channel map database has at least one delivery channel capability data field assigned to each delivery channel.

10. The terminal of claim 1, wherein the optimized configuration data generated by the processor includes data that provides an alternative configuration if the delivery channel cannot support the source characteristic of the audio signal.

11. The terminal of claim 1, wherein the memory stores audio equipment configuration data that is used by the processor to generate the optimized configuration data.

12. The terminal of claim 1, further comprising an output interface that couples the processor to an output mechanism to present the optimized configuration data to a user.

13. The terminal of claim 1, further comprising a control interface that couples the terminal with audio equipment.

14. The terminal of claim 13, wherein the control interface is one selected from the group of a hard wired connection, a wireless link, or a integrally formed connection with the terminal.

15. The terminal of claim 13, wherein audio equipment data from the audio equipment is transmitted through the control interface to the terminal and wherein the processor generates the optimized configuration data based on the audio equipment data.

16. The terminal of claim 15, wherein the optimized configuration data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

17. The terminal of claim 13, wherein the optimized configuration data is transmitted through the control interface to the audio equipment to configure the audio equipment based on the optimized configuration data.

18. A terminal for optimizing reproduction of an audio signal that has source characteristic data and that is transmitted through a delivery channel, comprising:
a receiver that receives the audio signal, the source characteristic data, and delivery channel capability data; and
a processor that generates optimized configuration data for reproducing the audio signal based on the source characteristic data and the delivery channel capability data.

19. The terminal of claim 18, wherein the source characteristic data and the delivery channel capability data are received via at least one data field associated with the delivery channel.